

Claims

(1) A bearing assembly comprising:

a spherical bearing having a center bore, the center bore having a center axis that defines mutually perpendicular axial and radial directions, the

5 bearing having an exterior surface with a pair of end face surfaces at axially opposite ends of the bearing and a convex surface between the pair of end face surfaces, the convex surface extending around the bearing axis;

a bearing support having a bearing seating surface, the bearing seating surface engaging the bearing convex surface; and,

10 a projection on the bearing support, the projection engaging with the bearing exterior surface.

(2) The bearing assembly of Claim 1, further comprising:

the projection engaging with at least one of the bearing end face surfaces.

15 (3) The bearing assembly of Claim 2, further comprising:

the projection being one of a plurality of projections on the bearing support that engage with the bearing end face surface.

(4) The bearing assembly of Claim 2, further comprising:

20 each bearing end face surface having a peripheral edge where the end face surface intersects the convex surface; and

the projection engaging into the at least one bearing end face surface at the peripheral edge.

(5) The bearing assembly of Claim 2, further comprising:

25 the pair of bearing end face surfaces being flat, parallel surfaces that extend around the center bore.

(6) The bearing assembly of Claim 2, further comprising:
the bearing seating surface being on a wall having a hole through the wall, the bearing being positioned in the hole.

5 (7) The bearing assembly of Claim 2, further comprising:
a disk supported on the bearing support adjacent the bearing; and,
the projection being on the disk.

(8) The bearing assembly of Claim 7, further comprising:
the projection being one of a plurality of projections on the disk that engage with the bearing end face surface.

10 (9) The bearing assembly of Claim 7, further comprising:
the disk having a center hole with a peripheral edge and the projection being on the center hole peripheral edge.

(10) The bearing assembly of Claim 7, further comprising:
the bearing seating surface being on a wall having a hole through the
15 wall, the bearing being positioned in the hole, the wall extending radially outwardly from the hole to a shoulder surface that projects axially outwardly from the wall; and,
the disk having an outer peripheral portion that engages with the shoulder surface.

(11) The bearing assembly of Claim 1, further comprising:
20 the projection engaging into the bearing convex surface.

(12) The bearing assembly of Claim 11, further comprising:
the projection being one of a plurality of projections on the bearing support that engages into the bearing convex surface.

(13) The bearing assembly of Claim 11, further comprising:

each bearing end face surface having a peripheral edge where the end face surface intersects the convex surface; and,

the projection engaging into the convex surface between the end face surface peripheral edges.

5 (14) The bearing assembly of Claim 11, further comprising:

a disk supported on the bearing support adjacent the bearing; and,
the projection being on the disk.

(15) The bearing assembly of Claim 14, further comprising:

the projection being one of a plurality of projections on the disk that
10 engage into the bearing convex surface.

(16) The bearing assembly of Claim 14, further comprising:

the disk having a center hole with a peripheral edge and a plurality of
resilient tabs extending radially inwardly from the peripheral edge, the plurality of
tabs engaging with the bearing; and,

15 the projection being on one of the tabs.

(17) The bearing assembly of Claim 16, further comprising:

the bearing seating surface being on a wall having a hole through the
wall, the bearing being positioned in the hole, the wall extending radially outwardly
from the hole to a shoulder surface that projects axially outwardly from the wall; and,

20 the disk having an outer peripheral portion that engages with the
shoulder surface.

(18) A bearing assembly comprising:

a bearing having an exterior surface and a center bore with a center
axis that defines mutually perpendicular axial and radial directions relative to the
25 bearing;

a bearing support having a bearing seating surface, the bearing seating surface engaging the bearing exterior surface;

a disk supported on the bearing support adjacent the bearing; and,

a projection on the disk, the projection engaging into the bearing exterior surface.

(19) The bearing assembly of Claim 18, further comprising:

the projection being one of a plurality of projections on the disk, the plurality of projections engaging into the bearing exterior surface.

(20) The bearing assembly of Claim 18, further comprising:

the bearing seating surface being on a wall having a hole through the wall, the bearing being positioned in the hole.

(21) The bearing assembly of Claim 20, further comprising:

the wall extending radially outwardly from the hole to a shoulder surface that projects axially outwardly from the wall; and,

the disk having an outer peripheral portion that engages with the shoulder surface.

(22) The bearing assembly of Claim 18, further comprising:

the disk having a center hole with a peripheral edge and the projection being on the center hole peripheral edge.

(23) The bearing assembly of Claim 22, further comprising:

the projection being one of a plurality of projections on the center hole peripheral edge that engage into the bearing exterior surface.

(24) The bearing assembly of Claim 18, further comprising:

the disk having a center hole with a peripheral edge and a plurality of resilient tabs that extend radially inwardly from the peripheral edge, the plurality of tabs engaging with the bearing exterior surface; and

the projection being on one of the tabs.

- 5 (25) The bearing assembly of Claim 24, further comprising:

the projection being one of a plurality of projections on the plurality of tabs, the plurality of projections engaging into the bearing exterior surface.